



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2014-0141; Directorate Identifier 2013-NM-024-AD; Amendment 39-17871; AD 2014-12-10]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 727-100 series airplanes. This AD is intended to complete certain mandated programs intended to support the airplane reaching its limit of validity (LOV) of the engineering data that support the established structural maintenance program. For certain airplanes, this AD requires repetitive inspections for cracking in stringers or frames until modification, and repair if necessary. We are issuing this AD to detect and correct cracking in stringers or frames originating at or near stringer-to-frame attachment fastener holes, which could result in reduced structural integrity of the airplane, and decompression of the cabin.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0141; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Chandra Ramdoss, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5239; fax: 562-627-5210; email: [chandraduth.ramdoss@faa.gov](mailto:chandraduth.ramdoss@faa.gov).

#### **SUPPLEMENTARY INFORMATION:**

##### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model 727-100 series airplanes. The NPRM published in the Federal Register on March 12, 2014 (79 FR 13931). The NPRM proposed actions intended to complete certain mandated

programs intended to support the airplane reaching its limit of validity (LOV) of the engineering data that support the established structural maintenance program. For certain airplanes, the NPRM proposed to require repetitive inspections for cracking in stringers or frames until modification, and repair if necessary. We are issuing this AD to detect and correct cracking in stringers or frames originating at or near stringer-to-frame attachment fastener holes, which could result in reduced structural integrity of the airplane, and decompression of the cabin.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (79 FR 13931, March 12, 2014) or on the determination of the cost to the public.

### **Conclusion**

We reviewed the relevant data and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (79 FR 13931, March 12, 2014) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 13931, March 12, 2014).

### **Costs of Compliance**

We estimate that this AD affects 2 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

### Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspections	60 work-hours X \$85 per hour = \$5,100 per inspection cycle	\$0	\$5,100 per inspection cycle	\$10,200 per inspection cycle

We estimate the following costs to do any necessary modifications that would be required based on the results of the inspections. We have no way of determining the number of aircraft that might need these modifications:

### On-condition costs

Action	Labor cost	Parts cost	Cost per product
Modification	600 work-hours X \$85 per hour = \$51,000 per inspection cycle	Up to \$11,481	Up to \$62,481 per modification

### Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2014-12-10 The Boeing Company:** Amendment 39-17871; Docket No. FAA-2014-0141; Directorate Identifier 2013-NM-024-AD.

**(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to The Boeing Company Model 727-100 series airplanes, certificated in any category, as identified in Boeing Service Bulletin 727-53-0041, Revision 6, dated September 5, 1991, unless previously modified using the service information specified in paragraphs (c)(1), (c)(2), or (c)(3) of this AD.

- (1) Boeing Service Bulletin 727-53-0041, Revision 4, dated July 27, 1973.
- (2) Boeing Service Bulletin 727-53-0041, Revision 5, dated January 25, 1990.
- (3) Boeing Service Bulletin 727-53-0041, Revision 6, dated September 5, 1991.

Note 1 to paragraph (c) of this AD: Boeing Service Bulletin 727-53-0041, Revision 4, dated July 27, 1973, is specified in Boeing Document D6-54860 “Aging Airplane Service Bulletin Structural Modification Program – Model 727,” Revision C, dated December 11, 1989, as mandated by AD 90-06-09, Amendment 39-6488 (55 FR 8370, March 7, 1990).

**(d) Subject**

Air Transport Association (ATA) of America Code 53, Fuselage.

**(e) Unsafe Condition**

This AD is intended to complete certain mandated programs intended to support the airplane reaching its limit of validity (LOV) of the engineering data that support the established structural maintenance program. We are issuing this AD to detect and correct cracking in stringers or frames originating at or near stringer-to-frame attachment

fastener holes, which could result in reduced structural integrity of the airplane, and decompression of the cabin.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Inspections**

Before the accumulation of 16,000 total flight cycles, or within 3,000 flight cycles after the effective date of this AD, whichever occurs later, do a high frequency eddy current inspection and a general visual inspection for cracking in stringers and frames originating at or near stringer-to-frame attachment fastener holes, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 727-53-0041, Revision 6, dated September 5, 1991. Repeat the inspections thereafter at intervals not to exceed 6,000 flight cycles until the modification specified by paragraph (h) of this AD is accomplished. If any crack is found during any inspection required by this paragraph: Before further flight, repair or modify the affected stringer-to-frame attachment locations, in accordance with Part V, "Repair Data," of the Accomplishment Instructions of Boeing Service Bulletin 727-53-0041, Revision 6, dated September 5, 1991.

**(h) Modification**

Modifying the affected stringer-to-frame attachment locations, in accordance with Part IV, "Preventive Modification Data," of the Accomplishment Instructions of Boeing Service Bulletin 727-53-0041, Revision 6, dated September 5, 1991, terminates the repetitive inspections required by paragraph (g) of this AD.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-ANM-LAACO-AMOC-REQUESTS@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

**(j) Related Information**

For more information about this AD, contact Chandra Ramdoss, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5239; fax: 562-627-5210; email: chandraduth.ramdoss@faa.gov.

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.



(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Service Bulletin 727-53-0041, Revision 6, dated September 5, 1991.

(ii) Reserved.

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

(4) You may view this service information at FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:  
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on June 4, 2014.

Jeffrey E. Duven,  
Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2014-13830 Filed 06/20/2014 at 8:45 am; Publication Date: 06/23/2014]